

TRANSFERRING AND QUEUEING LENGTH AND DATA AS ONE STREAM

A switch for switching packets. Each packet has a length. The switch includes a port card which receives packets from and sends packets to a network. The switch includes fabrics connected to the port card which switch the packets. Each fabric has a memory mechanism. Each fabric has a mechanism for determining the length of each packet received by the fabric and placing a length indicator with the packet so when the packet is stored in the memory mechanism, the determining mechanism can identify from the length indicator how long the packet is and where the packet ends in the memory. A method for switching packets having a length. The method includes the steps of receiving a packet at a port card of a switch. Then there is the step of sending fragments of the packet to fabrics of the switch. Next there is the step of receiving the fragments of the packet at the fabrics of the switch. Then there is the step of measuring the length of the packet at each fabric from the fragments of the packet received at each fabric. Next there is the step of appending a length indicator to the packet. Then there is the step of storing the packet with the length indicator in a memory mechanism of the fabric. Next there is the step of reading the packet from the memory mechanism. Then there is the step of determining where the packet ends from the length indicator of the packet.